December 2015

Peach Leaf Curl

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Peach Leaf Curl

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Peach leaf curl is one of the most common and widespread diseases affecting peach plantings in the United States. Recognized as a common peach trouble since 1821, it occurs in almost every region where peaches are grown. It has been known by names such as, curly leaf, curly blight, and leaf blister.

Although peach leaf curl is primarily a foliage disease, it also may affect blossoms, young twigs, and fruit. The disease causes loss of foliage early in the summer. This stimulates the affected tree to produce another crop of leaves, resulting in decreased tree vigor. Lowered tree vigor usually increases the danger of winter injury.

Symptoms

Peach leaf curl is first noticed early in the spring when leaves start to unfold. Diseased leaves are noticeably red and soon become distorted, thickened, and greatly curled as they develop. When diseased leaves are fully developed, they are lighter colored than normal; frequently flushed with red; and greatly curled, puckered, and distorted (Figure 1).

Leaves infected with leaf curl are also thicker than normal leaves and have a firm and leathery consistency. The entire leaf or any portion of it may become infected. A few or nearly all of the leaves on a tree may fall, depending upon the severity of the attack. As the growing season advances, the upper surface of diseased leaves turns gray and develops a powdery appearance. Dry weather soon withers the leaves causing them to fall early. However, cool weather delays defoliation.

Young infected peach fruits become distorted and seldom remain on the tree very long. Infected fruits show irregular, swollen, colored areas on their surfaces. These areas are usually wrinkled, without the normal peach fuzz, and look like they have been polished.

Cause

Peach leaf curl is caused by the fungus *Taphrina deformans*. Spores of

Figure 1. Typical peach leaf curl symptoms; notice the curling and puckering.

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the fungus are produced on the surface of diseased leaves in midsummer and give the leaf the powdery appearance previously described. These spores are spread to all parts of the tree by winds and rains, becoming lodged under bud scales and rough bark, and here they remain throughout the summer and winter months. In the spring, when the young peach buds begin to swell, germinating spores of the fungus penetrate the young leaves, causing leaf curl infection.

Management

Peach leaf curl can be prevented by a single spray application made in late fall, after leaf drop, or in late winter, **BEFORE** bud swell. It is critical that trees be sprayed before buds begin to swell! If buds have begun to swell or open, it is too late to obtain satisfactory control of peach leaf curl as infection has already occurred. Control is impossible once symptoms are visible.

Fungicides registered for control of peach leaf curl include liquid lime-sulfur, chlorothalonil (Daconil, Bravo 720), ferbam, and copper-based fungicides (numerous trade names are available) including Bordeaux mixture. Follow all label instructions regarding amounts of pesticide to use, method of application, and safety warnings.

If a dormant spray has been neglected, and disease develops, the fruit on affected trees should be thinned to compensate for the loss of leaves. In addition, fertilize and water trees to help maintain tree vigor—and be sure to get a leaf curl spray on next year!

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Rev 6/96 (2M)

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